# PATENT COOPERATION TREATY ...

From the INTERNATIONAL SEARCHING AUTHORITY	IN JUN 28 A 10: 01 PCT				
	MMER. NOTIFICATION OF TRANSMITTAL OF & HAUG, LLP OR THE DECLARATION  (PCT Rule 44.1)				
	Date of mailing (day/month/year) 25/06/2004				
	25/06/2004				
Applicant's or agent's file reference 930037-2008.	FOR FURTHER ACTION See paragraphs 1 and 4 below				
International application No. PCT/US 03/40529	International filing date (day/month/year) 19/12/2003				
Applicant					
et al.					
1. X The applicant is hereby notified that the International Searce Filing of amendments and statement under Article 19: The applicant is entitled, if he so wishes, to amend the clair					
When? The time limit for filing such amendments is normal international Search Report; however, for more detailed.	ally 2 months from the date of transmittal of the etails, see the notes on the accompanying sheet.				
Where? Directly to the International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Fascimile No.: (41–22) 740.14.38	·				
For more detailed instructions, see the notes on the acco	empanying sheet.				
2. The applicant is hereby notified that no International Searc Article 17(2)(a) to that effect is transmitted herewith.	h Report will be established and that the declaration under				
3. With regard to the protest against payment of (an) addition	onal fee(s) under Rule 40.2, the applicant is notified that:				
the protest together with the decision thereon has been transmitted to the International Bureau together with the applicant's request to forward the texts of both the protest and the decision thereon to the designated Offices.					
no decision has been made yet on the protest; the ap	plicant will be notified as soon as a decision is made.				
4. Further action(s): The applicant is reminded of the following:					
Shortly after 18 months from the priority date, the international a lf the applicant wishes to avoid or postpone publication, a notice priority claim, must reach the International Bureau as provided completion of the technical preparations for international publications.	e of withdrawal of the international application, or of the in Rules 90 <i>bis</i> .1 and 90 <i>bis</i> .3, respectively, before the				
Within 19 months from the priority date, a demand for internation wishes to postpone the entry into the national phase until 30 mg	nal preliminary examination must be filed if the applicant on the priority date (in some Offices even later).				
Within 20 months from the priority date, the applicant must perforbefore all designated Offices which have not been elected in the priority date or could not be elected because they are not bound	e demand or in a later election within 19 months from the				
Name and mailing address of the International Searching Authority	Authorized officer				

Form PCT/ISA/220 (July 1998)

European Patent Office, P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, = Fax: (+31-70) 340-3016

Alicja Van der Heijden

#### **NOTES TO FORM PCT/ISA/220**

These Notes are intended to give the basic instructions concerning the filing of amendments under article 19. The Notes are based on the requirements of the Patent Cooperation Treaty, the Regulations and the Administrative Instructions under that Treaty. In case of discrepancy between these Notes and those requirements, the latter are applicable. For more detailed information, see also the PCT Applicant's Guide, a publication of WIPO.

In these Notes, "Article", "Rule", and "Section" refer to the provisions of the PCT, the PCT Regulations and the PCT Administrative Instructions respectively.

### **INSTRUCTIONS CONCERNING AMENDMENTS UNDER ARTICLE 19**

The applicant has, after having received the international search report, one opportunity to amend the claims of the international application. It should however be emphasized that, since all parts of the international application (claims, description and drawings) may be amended during the international preliminary examination procedure, there is usually no need to file amendments of the claims under Article 19 except where, e.g. the applicant wants the latter to be published for the purposes of provisional protection or has another reason for amending the claims before international pbulication. Furthermore, it should be emphasized that provisional protection is available in some States only.

#### What parts of the international application may be amended?

Under Article 19, only the claims may be amended.

During the international phase, the claims may also be amended (or further amended) under Article 34 before the International Preliminary Examining Authority. The description and drawings may only be amended under Article 34 before the International Examining Authority.

Upon entry into the national phase, all parts of the international application may be amended under Article 28 or, where applicable, Article 41.

#### When?

Within 2 months from the date of transmittal of the international search report or 16 months from the priority date, whichever time limit expires later. It should be noted, however, that the amendments will be considered as having been received on time if they are received by the International Bureau after the expiration of the applicable time limit but before the completion of the technical preparations for international publication (Rule 46.1).

#### Where not to file the amendments?

The amendments may only be filed with the International Bureau and not with the receiving Office or the International Searching Authority (Rute 46.2).

Where a demand for international preliminary examination has been its filed, see below.

## How?

Either by cancelling one or more entire claims, by adding one or more new claims or by amending the text of one or more of the claims as filed.

A replacement sheet must be submitted for each sheet of the claims which, on account of an amendment or amendments, differs from the sheet originally filed.

All the claims appearing on a replacement sheet must be numbered in Arabic numerals. Where a claim is cancelled, no renumbering of the other claims is required. In all cases where claims are renumbered, they must be renumbered consecutively (Administrative Instructions, Section 205(b)).

The amendments must be made in the language in which the international application is to be published.

#### What documents must/may accompany the amendments?

#### Letter (Section 205(b)):

The amendments must be submitted with a letter.

The letter will not be published with the international application and the amended claims. It should not be confused with the "Statement under Article 19(1)" (see below, under "Statement under Article 19(1)").

The letter must be in English or French, at the choice of the applicant. However, if the language of the international application is English, the letter must be in English; if the language of the international application is French, the letter must be in French.

## NOTES TO FORM PCT/ISA/220 (continued)

The letter must indicate the differences between the claims as filed and the claims as amended. It must, in particular, indicate, in connection with each claim appearing in the international application (it being understood that identical indications concerning several claims may be grouped), whether

- (i) the claim is unchanged;
- (ii) the claim is cancelled;
- (iii) the claim is new;
- (iv) the claim replaces one or more claims as filed;
- (v) the claim is the result of the division of a claim as filed.

# The following examples illustrate the manner in which amendments must be explained in the accompanying letter:

- [Where originally there were 48 claims and after amendment of some claims there are 51]:
   "Claims 1 to 29, 31, 32, 34, 35, 37 to 48 replaced by amended claims bearing the same numbers; claims 30, 33 and 36 unchanged; new claims 49 to 51 added."
- [Where originally there were 15 claims and after amendment of all claims there are 11]: "Claims 1 to 15 replaced by amended claims 1 to 11."
- [Where originally there were 14 claims and the amendments consist in cancelling some claims and in adding new claims]:
   "Claims 1 to 6 and 14 unchanged; claims 7 to 13 cancelled; new claims 15, 16 and 17 added." or
   "Claims 7 to 13 cancelled; new claims 15, 16 and 17 added; all other claims unchanged."
- [Where various kinds of amendments are made]:
   "Claims 1-10 unchanged; claims 11 to 13, 18 and 19 cancelled; claims 14, 15 and 16 replaced by amended claim 14; claim 17 subdivided into amended claims 15, 16 and 17; new claims 20 and 21 added."

## "Statement under article 19(1)" (Rule 46.4)

The amendments may be accompanied by a statement explaining the amendments and indicating any impact that such amendments might have on the description and the drawings (which cannot be amended under Article 19(1)).

The statement will be published with the international application and the amended claims.

## It must be in the language in which the international appplication is to be published.

It must be brief, not exceeding 500 words if in English or if translated into English.

It should not be confused with and does not replace the letter indicating the differences between the claims as filed and as amended. It must be filed on a separate sheet and must be identified as such by a heading, preferably by using the words "Statement under Article 19(1)."

It may not contain any disparaging comments on the international search report or the relevance of citations contained in that report. Reference to citations, relevant to a given claim, contained in the international search report may be made only in connection with an amendment of that claim.

# Consequence if a demand for international preliminary examination has already been filed

If, at the time of filing any amendments under Article 19, a demand for international preliminary examination has already been submitted, the applicant must preferably, at the same time of filing the amendments with the International Bureau, also file a copy of such amendments with the International Preliminary Examining Authority (see Rule 62.2(a), first sentence).

# Consequence with regard to translation of the international application for entry into the national phase

The applicant's attention is drawn to the fact that, where upon entry into the national phase, a translation of the claims as amended under Article 19 may have to be furnished to the designated/elected Offices, instead of, or in addition to, the translation of the claims as filed.

For further details on the requirements of each designated/elected Office, see Volume II of the PCT Applicant's Guide.

# **PATENT COOPERATION TREATY**

# **PCT**

# **INTERNATIONAL SEARCH REPORT**

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference	(Form PCT/ISA/2	of Transmittal of International Search Report (20) as well as, where applicable, item 5 below.
930037-2008.	ACTION	
International application No.	International filing date (day/month/year)	(Earliest) Priority Date (day/month/year)
PCT/US 03/40529	19/12/2003	31/12/2002
Applicant		
et al.		
according to Article 18. A copy is being to		nority and is transmitted to the applicant
This International Search Report consists  X It is also accompanied by	a copy of each prior art document cited in this	report.
1. Basis of the report		-
	international search was carried out on the bases otherwise indicated under this item.	sis of the international application in the
the international search w Authority (Rule 23.1(b)).	ras carried out on the basis of a translation of t	he international application furnished to this
b. With regard to any nucleotide an was carried out on the basis of the		nternational application, the international search
filed together with the inte	rnational application in computer readable for	n.
furnished subsequently to	this Authority in written form.	
furnished subsequently to	this Authority in computer readble form.	
	osequently furnished written sequence listing d is filed has been furnished.	oes not go beyond the disclosure in the
the statement that the info furnished	ormation recorded in computer readable form is	s identical to the written sequence listing has been
2. Certain claims were fou	nd unsearchable (See Box I).	
3. Unity of invention is lac	king (see Box II).	
4. With regard to the title,		·
X the text is approved as su	bmitted by the applicant.	
	hed by this Authority to read as follows:	
_		
5. With regard to the abstract,		
X the text is approved as su	bmitted by the applicant.	
the text has been establis	hed, according to Rule 38.2(b), by this Authorie date of mailing of this international search rep	ty as it appears in Box III. The applicant may, port, submit comments to this Authority.
6. The figure of the drawings to be publ		1
X as suggested by the appli	cant.	None of the figures.
because the applicant fail	ed to suggest a figure.	_
because this figure better	characterizes the invention.	

# INTE JATIONAL SEARCH REPORT

...ernational Application No PCT/US 03/40529

A. CLASSIFICATION OF SUBJECT MATTER IPC 7 D01D5/253 D21F1/00

According to International Patent Classification (IPC) or to both national classification and IPC

### B. FIELDS SEARCHED

 $\begin{array}{ccc} \text{Minimum documentation searched (classification system followed by classification symbols)} \\ IPC & 7 & D01D & D21F \end{array}$ 

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

ENTS CONSIDERED TO BE RELEVANT	
Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
EP 1 333 120 A (HEIMBACH GMBH THOMAS JOSEF) 6 August 2003 (2003-08-06)	1-15, 21-27, 34-43, 48,49
the whole document	16-20
US 6 352 772 B1 (KELLER ROBERT ALLEN) 5 March 2002 (2002-03-05)  the whole document	1-15, 21-27, 34-43, 48,49 16-20
US 5 617 903 A (BOWEN JR DAVID) 8 April 1997 (1997-04-08) the whole document	16-20
	EP 1 333 120 A (HEIMBACH GMBH THOMAS JOSEF) 6 August 2003 (2003-08-06)  the whole document  US 6 352 772 B1 (KELLER ROBERT ALLEN) 5 March 2002 (2002-03-05)  the whole document  US 5 617 903 A (BOWEN JR DAVID) 8 April 1997 (1997-04-08)

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X Further documents are listed in the continuation of box C.	Patent family members are listed in annex.
<ul> <li>Special categories of cited documents:</li> <li>"A" document defining the general state of the art which is not considered to be of particular relevance</li> <li>"E" earlier document but published on or after the international filing date</li> <li>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</li> <li>"O" document referring to an oral disclosure, use, exhibition or other means</li> <li>"P" document published prior to the international filing date but later than the priority date claimed</li> </ul>	<ul> <li>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</li> <li>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</li> <li>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.</li> <li>"&amp;" document member of the same patent family</li> </ul>
17 June 2004	Date of mailing of the international search report 25/06/2004
Name and mailing address of the ISA  European Patent Office, P.B. 5818 Patentlaan 2  NL - 2280 HV Rijswijk  Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  Fax: (+31-70) 340-3016	Authorized officer  Tarrida Torrell, J

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# INTI NATIONAL SEARCH REPORT

PCT/US 03/40529

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 94/10539 A (GILLETTE CO ; SWEENEY PHILIP J (US); TSENG MINGCHIH M (US)) 11 May 1994 (1994-05-11) the whole document	52
		<i>(</i> -
		. 10

# INTE IATIONAL SEARCH REPORT

Information on patent family members

PCT/US 03/40529

Patent document cited in search report	ļ	Publication date		Patent family member(s)		Publication date
EP 1333120	Α	06-08-2003	EP	1333120	A1	06-08-2003
			CA	2416961	A1	01-08-2003
			US	2003232557		18-12-2003
			US	2003148687	A1	07-08-2003
US 6352772	B1	05-03-2002	US	5985450	A	16-11-1999
US 5617903	Α	08-04-1997	NONE			
WO 9410539	A	11-05-1994	US	5313909	A	24-05-1994
			AU	679015		19-06-1997
			AU	5457594	Α	24-05-1994
			BR	9307377	Α	31-08-1999
			CN	1097969		01-02-1995
			DE	69329555		16-11-2000
			DE	69329555		31-05-2001
			EP	0668991		30-08-1995
			ES	2152264		01-02-2001
			JP	8503145		09-04-1996
			MX	9306881		30-06-1994
			TR	28298		17-04-1996
			WO	9410539		11-05-1994
			ZA	9308022	Α	28-06 <b>-</b> 1994